

**UNITED STATES DISTRICT COURT
DISTRICT OF CONNECTICUT**

UNITED STATES OF AMERICA

v.

Ionia Management, S. A.

Defendant

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) **CRIMINAL NO. 3:07CR134 (JBA)**
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Special Master Appointment and Scope of Work

In accordance with the sentence imposed by the Court on December 14, 2007, Mr. Robert C. Bundy is hereby appointed the Special Master in the above captioned case for the period of probation, unless otherwise modified by the Court. The purpose of this order is to formalize his appointment, and to better define the scope of the Special Master's duties and responsibilities.

Reports required in this order are to be made to the Probation Office of the U. S. District Court for the District of Connecticut ("Probation Office"), the United States Attorneys' Office for the District of Connecticut, the Environmental Crimes Section of the United States Department of Justice and the United States Coast Guard, collectively the ("United States" or the "Government"), Ionia Management S.A. ("IONIA"), and the designated counsel for IONIA.

I. PURPOSE, OBJECTIVES & APPLICABILITY

The purpose of this order is to assist the Special Master in ensuring that all vessels technically managed or operated by IONIA, which call on United States ports, comply with the International Convention for the Prevention of Pollution from Ships (MARPOL), and applicable U.S. law, *inter alia*, the Act to Prevent Pollution from Ships (APPS).

This order is not intended to replace the International Safety Management Code (ISM), or any other applicable International legal requirement or United States law or regulation.

OBJECTIVES FOR IONIA

To this end, IONIA, as set forth in more detail below, shall take steps to ensure shipboard and shore-side employees develop effective procedures to achieve the following overarching objectives, with the ultimate goal of achieving compliance with MARPOL. Specifically, for vessels covered under this order, IONIA must develop:

- (1) effective procedures for its crewmembers to keep written records which account for the generation, storage, processing, transfer and disposal of waste oil, oily bilge water, sludge, and other oil-contaminated waste generated in the engine room;
- (2) an effective methodology and procedures to analyze and compare these shipboard records with the electronic records generated by the “Special Waste Oil Monitoring System” (SWOMS) onboard the covered vessels; and
- (3) effective, systematic procedures for continuous assessment and improvement of IONIA’s compliance efforts. Such procedures shall be designed to foster a culture of compliance – and change where necessary – from senior managers of the company to the lowest level crewmembers.

OBJECTIVES FOR THE SPECIAL MASTER

The Special Master shall conduct biannual hearings during the term of probation, to achieve the following broad objectives:

- (1) consult with and instruct the Independent Environmental Consultant as appropriate, to assess the accuracy of the shipboard oily waste records to ensure compliance with MARPOL;
- (2) evaluate the results of any audits or assessments performed under this order, and assess the adequacy of company procedures to achieve the objectives for IONIA set forth above; and
- (3) submit a report of findings and recommendations regarding the above within 30 days of each hearing.

APPLICABILITY

This order applies to all vessels technically managed and/or operated by IONIA which call on ports in the United States. As of the date of this order, the following vessels are managed by IONIA and expected to call on U.S. ports:

<u>Vessel Name</u>	<u>IMO #</u>
FIDIAS	9358955
THEO T	9262194

If any additional vessels managed, operated, and/or controlled by IONIA will trade in United States’ ports during the period of probation, then they will be subject to this order and the other conditions of probation.

II. CORPORATE COMPLIANCE MANAGER (CCM)

Within thirty (30) days of this order, IONIA shall designate in writing a senior corporate officer as the Corporate Compliance Manager (hereinafter "Corporate Compliance Manager" or CCM) who shall report directly to the President and/or Managing Director of IONIA. The Corporate Compliance Manager position must be filled by an individual with significant maritime vessel operational background, and who possesses the authority to ensure full adherence to the monitoring requirements set forth in this order. Copies of this designation shall be provided to all parties listed in Section XII.

The CCM could be the same individual as IONIA's "designated person" under the ISM Code. The CCM shall be responsible for coordinating with the Special Master, as more fully described below.

IONIA shall provide the name of and means of communicating with the CCM to the Special Master.

The CCM shall be authorized to access all of IONIA's records, documents, personnel, and vessels, subject to this order, for the purpose of implementing and assuring compliance with this order.

The CCM shall be responsible for ensuring that observations resulting from any internal audit, inspection, or record review are appropriately documented, tracked, and resolved and that such resolutions are thoroughly documented in a format that can be readily audited.

III SPECIAL MASTER'S INDEPENDENT ENVIRONMENTAL CONSULTANT (IEC) & INDEPENDENT CORPORATE CONSULTANT (ICC)

Mr. Richard Wigger of Compliance systems will serve as Independent Environmental Consultant (IEC). The IEC shall assist the Special Master with technical matters, records review and analysis, auditing and inspecting vessels, and other duties reasonably related to carrying out this order. James Sanborn, of Sanborn & Associates, is designated as the Independent Corporate Consultant (ICC). The ICC shall assist the Special Master in assessing company practices, including but not limited to employee training, ship manning, scheduling, budgeting, and overall vessel management.

The IEC and ICC are primarily available as technical experts to assist the Special Master in meeting his objectives. However, the IEC and ICC will also be available to IONIA as needed to assist and advise IONIA employees in developing effective compliance measures, in furtherance of the objectives set forth above for IONIA.

IV. WASTE OIL RECORDS MAINTENANCE AND REPORTING

a. Shipboard Records

There are a number of records relevant to waste oil generation, management, and processing which should be reviewed regularly as one means of helping to ensure compliance with MARPOL and other applicable marine environmental protection requirements. Such records include the Oil Record Book (ORB), tank sounding logs, tank sounding tables, and engine room alarm records. To the extent such records are not required under International or U.S. law, such records shall nonetheless be maintained on a regular basis during the period of probation onboard the covered vessels.

Tank soundings of all waste oil and oily water waste tanks, including but not limited to the bilge holding tank, waste oil tank, oily bilge tank, incinerator tank, and any other tank onboard the vessel which contains machinery space oily waste or oily water shall be maintained onboard the covered vessels. These tank soundings shall be taken and recorded in a tank sounding log daily. The sounding, once recorded, shall also be converted and recorded as volumetric measurement by use of the tank sounding tables.

The daily sounding shall be taken by the appropriate engine room watch stander, and witnessed and initialed in the tank sounding log by a designated deck officer.

Entries made into the Engine Room Oil Record Book shall be made by the Chief Engineer and each page shall be signed by the vessel's Chief Engineer and Master.

The ship's engine room alarm printout shall be reviewed by the Chief Engineer at least once per week and compared with the Engine Room Oil Record Book and initialed by the Chief Engineer upon review. The Chief Engineer shall have a duty to report inconsistencies to the CCM, and any other report required under the ISM Code, and investigate the cause or source of such inconsistency.

The CCM shall be responsible for ensuring each covered vessel submits copies of the aforementioned records on a monthly basis, or as near a monthly basis as practicable, as determined by the Special Master. Copies of these records shall be submitted to the Special Master, the IEC, and the United States, or other parties designated by the Special Master. It is desired, but not required, such submissions be made in electronic ".pdf" or similar format as a matter of efficiency.

b. Special Waste Oil Monitoring System (SWOMS) Records

As a special condition of probation separate and apart from the appointment of a Special Master, the Court ordered that a special waste oil monitoring system (SWOMS) be installed on the covered vessels which is designed to electronically monitor and record all waste oil generation and processing in the engine room, in a tamper proof and automated manner. The intent of this special condition of probation is to ensure this monitoring system creates an independent record which can be sent to the company and reviewed by company officials who

can detect anomalies. In addition, when analyzed, this independent record can be compared with the records kept by shipboard personnel in order to account for the oily bilge waste and waste oil in the engine room, and ultimately ensure compliance and accurate shipboard records.

The SWOMS must have the capability to record, and the data be electronically sent, to IONIA's shore-side offices.¹ The data shall be electronically recorded by the SWOMS at least hourly. The CCM will be responsible for ensuring that each covered vessel submit copies of this electronic record in a format which can be compared with shipboard records kept by IONIA crewmembers. The CCM will be responsible for transmitting this data at the same time and manner as the monthly shipboard records discussed above in paragraph a.

The CCM shall be responsible for the development of company procedures to review and analyze the shipboard records, in conjunction with the SWOMS data to ensure compliance with MARPOL and accurate oily waste records.

V. DUTIES & RESPONSIBILITIES OF THE SPECIAL MASTER

a. Preliminary Duties

Within the first 45 days after this order is signed, the Special Master shall:

- i. Read the entire record of trial proceedings;
- ii. review the record of proceedings for the probation violation found by the court on December 14, 2007. In determining the appropriate sanction, if any, for the probation violation found, the court may take into consideration any observations or recommendations the Special Master makes in his first report.
- iii. Inquire into any existing business relationships that the IEC and ICC, or their affiliates, may have with IONIA. If such relationship exists and raises a serious question of a conflict of interest, or an appearance of one, which jeopardizes the objectivity of the IEC and ICC, then the Special Master shall report such relationship immediately to the Court with a recommendation, with a copy to the United States and counsel for Ionia. Otherwise, the Special Master shall include its findings in its first report when it becomes due. The Special Master shall advise IEC and ICC that they have an ongoing duty to disclose to the Special Master any such future relationship which may arise or be proposed during the term of probation.

¹ One desired feature of the SWOMS concept is that the system have the capability to transmit the data automatically to the corporate headquarters, without the need for human intervention. IONIA has represented that, through its efforts to obtain such a feature for its SWOMS system, the technology and hardware does not currently commercially exist to achieve this, but is under development. Within one year of the effective date of this order, IONIA will either have this technology installed, or, alternatively, submit for the Special Master's consideration an updated assessment and projection for the availability and feasibility of such technology. The Special Master will then make a recommendation to the Court on how to proceed.

b. Records Review

For each of the covered vessels, the Special Master will, with the assistance of the IEC and/or ICC, be responsible for reviewing and analyzing the shipboard records discussed above, as they are submitted by the CCM. The Special Master, with the assistance of the IEC and/or ICC, will also assess the waste stream generation onboard the covered vessels, and compare and analyze these records with records and data from the SWOMS.

c. Hearings

Unless otherwise provided for below, the Special Master shall hold hearings at a mutually convenient time for the United States and Ionia every six (6) months, or as near thereto as practicable. The primary objective of the hearings is to assess IONIA's MARPOL compliance efforts, and more broadly IONIA's progress in meeting the overall objectives of this order. Ultimately, as a result of the hearings, the Special Master will be expected to make a Report of Findings and Recommendations to the Court on a biannual basis.

Such hearings may include the calling of witnesses under oath and the examination of evidence as deemed necessary by the Special Master to achieve the objectives of this order. Such witnesses normally may include the CCM, other IONIA shore-side personnel, and/or crewmembers from covered vessels, if deemed appropriate by the Special Master. Under some circumstances, it may be necessary for the IEC or ICC to provide testimony in the form of analysis, opinions, or factual reporting of the results of any audit performed onboard the covered vessels. The IEC and/or ICC may also testify regarding recommendations made to the CCM and/or the Special Master.

The Special Master will ensure that the oath is administered to the witnesses and a verbatim record is made of the proceedings. A copy of the verbatim record shall be appended to the Special Master's biannual report. In addition, reports of findings for audits performed by the IEC and/or assessments by the ICC shall also be appended to the Special Master's report.

During the conduct of the hearing, witnesses may be questioned by the Special Master, a designated representative of the United States, a representative of IONIA, and, the Court. The testimony shall be sworn. The Special Master retains the sole discretion to limit the questioning of witnesses in the interest of efficiency.

Such hearings will normally be held at the U.S. District Court located in New Haven, and normally shall include live testimony of witnesses. However, the Special Master, within his sole discretion, may permit Video Conference testimony upon request by a party or a witness, if appropriate.

Any party may recommend or request certain witnesses or evidence be presented, but the final decision on which witnesses and evidence is presented at such hearings rests with the sole discretion of the Special Master. Such hearings shall last as long as deemed necessary by the Special Master to meet the objectives of this order.

The Federal Rules of Evidence do not necessarily apply to these hearings with the exception of Federal Rule of Evidence 501 regarding privileges. However, the Special Master may admit and consider evidence he deems reliable, under the circumstances, with the spirit of the Rules of Evidence in mind.

The first hearing shall occur in December 2008. The hearings shall be conducted on or about the first Wednesdays of each June and December during the period of probation, thereafter. The Special Master should inform the United States and IONIA, at least 60 calendar days in advance, regarding the location, date, and time of the scheduled hearing. The Special Master will also notify appropriate witnesses of such information at least 45 days in advance of the hearing.

In some cases, the Special Master may deem a hearing as not being necessary, either because of demonstrated progress by Ionia or because the Special Master does not see any benefit to a hearing. If in the Special Master's sole judgment no hearing is necessary under these provisions, and the intent of this order can be satisfied without a hearing, and an adequate Report of Findings and Recommendations can be made by the Special Master, then he may dispense with a hearing. On the other hand, if in the Special Master's sole judgment more frequent hearings are necessary and useful, he may make a recommendation to the Court at any time stating his basis for the recommendation, and request authority to require additional hearings.

d. Audits & Assessments

The Special Master shall be responsible, through the assistance of the IEC, for conducting at least three shipboard audits during the term of probation for each vessel covered under this order which trades to U.S. ports. Specifically, an initial audit, ongoing audit, and a final audit shall be conducted. The Special Master need not personally attend or perform these audits, and may reasonably rely on the technical expertise of the IEC in carrying out these requirements, following the audit guidelines contained in Attachment A to this order.

The Special Master may, from time to time, request assistance from the ICC to conduct assessments of the manning protocols, equipping, corporate structure, budgeting, training, or any other business characteristic of IONIA which are reasonably related to the company's ability to comply with MARPOL. The form and substance of such assessments shall be described by the Special Master in writing to the ICC in advance of any such assessment. Upon completion, the ICC shall submit a report of findings of the assessment to the Special Master in a format designated by the Special Master.

e. Biannual Reports of the Special Master

Within 30 days of conclusion of each biannual hearing, the Special Master must submit a Report of Special Master Findings and Recommendations to the Court. The content of such reports should generally include at least the following:

- an introduction including basic background information and the status of the Special Master's work;

- a discussion and summary of the evidence admitted and testimony taken at the hearing;
- a description and evaluation of (1) efforts and procedures of the CCM and other IONIA employees in reviewing and analyzing the shipboard records; and (2) the efforts and procedures of the CCM and other IONIA employees in accessing, analyzing, and comparing the SWOMS records to the shipboard records to ensure accuracy of records and compliance;
- an assessment and analysis of the accuracy of the shipboard records when compared to each other and the SWOMS records;
- a discussion of unusual matters of interest or concern of the Special Master.
- a discussion of any opinions or recommendations of the Special Master.

Nothing in this order shall prevent the Special Master from reporting concerns of an immediate interest. In particular, if a significant anomaly is noted in the review of records, or other facts that in the Special Master's judgment warrants immediate notification between biannual hearings, the Special Master shall take necessary steps to ensure that the Court, the United States, and IONIA are immediately notified of such anomaly or facts in order to investigate further and take remedial measures.

VI. EXPENSES & FEES

IONIA shall be responsible for paying the fees and expenses of the Special Master, the IEC, and the ICC. The Special Master shall be paid an hourly fee of \$350 per hour for the term of probation, unless otherwise modified by the Court. The IEC and ICC will charge IONIA their normal hourly rate for services rendered to the Special Master. Any disbursement for expenses over \$500.00, exclusive of fees, shall require written approval by IONIA and the United States in advance. The Special Master, ICC, and IEC will submit at least quarterly invoices of expenses and fees to IONIA.

VII. MINIMUM ENGINEERING RISK MITIGATION MEASURES

Unless otherwise stated, all of the requirements set forth in Attachment B, if not in contravention of any Class, Treaty or other Flag State requirements, shall be implemented on the vessels trading to the U.S. which are covered under this order as soon as practicable as determined by the Special Master, but in no case later than one year from the effective date of this order.

VIII. NON-COMPLIANCE

Failure to comply with any part of this order (including but not limited to refusal to pay valid charges for the IEC, ICC, or Special Master or failure to provide the access to vessels, facilities, personnel or documents) shall be brought to the Court's immediate attention.

IX. CHANGES IN CONTROL/TECHNICAL MANAGEMENT/OPERATION

The Court recognizes that during the term of probation, the number and identity of vessels operated, managed, and/or controlled by IONIA may increase or decrease.

Any vessel, the operation, management or control of which is assumed by IONIA, which calls on ports in the United States, shall be subject to the terms and conditions of this order. Any vessel removed from the operation, management, or control by IONIA shall be excluded from the scope of the order.

IONIA agrees that it will immediately (but in no event later than 21 days following a change) notify the United States and the Special Master of any change in name, flag of registry, recognized organization, ownership or class society of any such vessel managed by IONIA.

a. Vessels Added to the List of Covered Vessels

If additional vessels come under the technical management, operation, and/or control of IONIA, and such vessels call on ports in the navigable waters of the United States, such vessels shall be subject the provisions of this order.

(i) **New Buildings** - IONIA shall perform a waste stream analysis on each class of new buildings for which it contracts, and if such vessels calls on United States ports. It shall ensure that there is a balance between the estimated waste stream generated and the capacity of the vessels disposal equipment to properly dispose of the waste generated.

(ii) **Additional Vessels** – If IONIA acquires or assumes technical management, operation, and/or control of additional vessels, and/or adds vessels covered under Section I, it shall perform an audit equivalent to the initial audit described in Attachment A of this order prior to entry into Unites States ports.

X. REVISIONS/MODIFICATIONS TO THE ORDER

On request and recommendation of the Special Master, or upon motion by the United States or IONIA, the terms of this order may be modified by the Court.

During the probationary period, a copy of this must be kept at all times in pre-designated locations within each of the covered vessels where it can be readily accessed by senior shipboard personnel. Such locations must include the quarters of the Master and Chief Engineer, as well as in the engine control room and on the bridge.

XII. POINTS OF CONTACT

For purposes the notifications required by this order, the following points of contact are provided:

- (a) U.S. Attorney's Office
District of Connecticut
915 Lafayette Blvd, Room 309
Bridgeport, CT 06604

ATTN: Mr. William Brown, Esq.
(203) 696-3022 - phone
(203) 579-5575 - fax
Email: william.m.brown@usdoj.gov
- (b) U.S. Department of Justice
Environmental Crimes Section
601 "D" Street, NW
Washington, D.C. 20004

ATTN: Ms. Lana Pettus
(202) 305-0403
(202) 305-0397 (fax)
Email: Lana.Pettus@usdoj.gov
- (c) U.S. Coast Guard
Commandant (CG-543)
Office of Vessel Activities
Foreign Vessel and Offshore Activities Division
2100 Second St., S.W.
Washington, D.C. 20593-0001
Attn: LT Kevin McDonald
Email: Kevin.J.McDonald2@uscg.mil
- (d) U.S. Probation Department
District of Connecticut
157 Church Street, 22nd Floor
New Haven, CT 06510

Attn: Mr. Patrick Norton
- (e) Ionia Management S.A.
12 Laskou Street
Piraeus, Greece 185 36

(f) Chalos, O'Connor & Duffy, LLP
366 Main Street
Port Washington, NY 11050

Attn: Mr. George M. Chalos, Esq.
Email: gmc@codus-law.com

IT IS SO ORDERED.

/s/
Janet Bond Arterton
United States District Court Judge

Dated at New Haven, Connecticut this 18th day of April, 2008

ATTACHMENT A

Procedural Guidelines for the Initial, Ongoing, and Final Audits

A. Initial Audit

Within ninety (90) days of the issuance of this order, an Initial Audit shall be performed on all covered vessels to ascertain and evaluate all aspects of vessel equipping, training, and operation effecting oily waste production and management practices. This includes, but not necessarily limited to, an evaluation of the vessels' systems, equipment and components and current practices whether documented or not, the knowledge, skills, and abilities of ship and shore-side personnel as they relate to the requirements of this order and applicable International requirements regarding the handling, processing, and disposal of oily waste. The initial audit may be considered a discovery action or an investigation, in that its purpose is to review all areas of operation that can impact various elements of pollution prevention and environmental protection. Exceeding a typical SMS audit or vetting process, it is used to determine practices, procedures and equipment conditions not typically documented during a routine inspection by class society, port or flag state inspection or routine audit that may be required by ISM or other vetting process. The results of the Initial Audit are to be used to assist the Special Master in making recommendations to the CCM and/or the Court.

In addition to the criteria set forth below, the Initial Audit shall include a survey of all shipboard engineering officers on vessels covered by this order, at all levels, for information on how to make the SWOMS, OWS, OCM, associated systems and waste management processes tamper proof and for methods on reducing or improving the handling of waste accumulations within machinery spaces. Participation shall be mandatory for all engineering personnel. The survey shall request the opinions of the vessels' engineers into their ability to adequately maintain the vessel systems, equipment and components. The survey will emphasize non-retaliation for open and honest opinions and reports of current non-compliant circumstances. The responses will be maintained in original format and made available to the IEC. The original survey responses shall be included in the IEC's and/or ICC's report to the Special Master.

At the conclusion of the Initial Audit, but in no event later than one hundred twenty (120) days following issuance of this order, the IEC's report shall prepare a Report of Findings for the Special Master. The Report of Findings shall contain detailed recommendations to the Special Master regarding suggested improvements that should be made to IONIA's Safety Management System or other operating procedures with the goal of adding value to and increasing the effectiveness of existing practices, with ultimate goal of ensuring full compliance with MARPOL.

The initial audit shall:

- Be performed while the vessels are underway, when systems are in operation and when personnel are performing their normal routines;

- Assess all waste streams developed from any system, equipment and components found in any engine room, machinery space or pump room onboard the covered vessels. This will include observation and documentation describing the leakages apparent on every system that can contribute to bilge loading. The audit will determine the status and quantify leakages stemming from:
 - all pump and valve seals and glands during operation,
 - all piping systems, flanges, gaskets, fittings and joints,
 - all equipment casings such as main and auxiliary engines, reduction gears,
 - operation of engines, boilers, incinerators, evaporators and,
 - every other mechanical component found aboard IONIA vessels.

- Assess the adequacy and performance of the SWOMS, Oily Water Separator, Oil Content Meter, Incinerator, Sewage System and any other pollution prevention equipment to handle the quantities and types of wastes developed during normal operations. This assessment shall include an evaluation of the capacities for all tanks or containers associated with the management of sludge, bilges and oily wastes or other wastes. It shall include an evaluation of documentation tracking, maintenance and repair, modifications of all pollution prevention equipment, and notifications of equipment failure to shoreside personnel.

- The assessment of the adequacy and performance of the Oily Water Separator and Oil Content Meter will specifically include an operational test of the system under actual operational conditions, with consideration of the manufacturer's recommendations. This test shall include one (1) hour of continuous processing of the contents of the Bilge Holding Tank without dilution, conducted in the presence of the auditor(s), Chief Engineer, First Engineer, and any other engine room personnel assigned responsibility for the operation and/or maintenance of the Oily Water Separator. If an actual discharge is not feasible due to the location of the vessel, then the discharge piping shall be disassembled after the control valve and the discharge redirected back to the bilges, or holding tank provided safety procedures are in place and approved by Class. Soundings of the Bilge Holding Tank shall be made before and after the test and made a part of the audit record, along with a calculation made of actual throughput of the OWS. All alarms shall be recorded and made a part of the audit record. All of the above shall be recorded in the Engine Room Oil Record Book. In the event that the assessment determines that the Oily Water Separator is not adequate, then an immediate report shall be made to the Special Master, the CCM and to the United States.

- Assess each vessel's crew and their ability to handle the operational, maintenance and repair workloads in maintaining all systems, equipment and components onboard in an effort to minimize waste stream development and to determine if the size of the engineering crew is adequate for workloads;

- Assess the adequacy of the procedures, current practices and equipment, including storage capabilities used to manage shipboard solid wastes generated in all areas of the vessel and the effectiveness of garbage management plans;
- Assess the machinery spaces for unauthorized ways to dispose of waste;
- Assess the adequacy of the vessel crewmembers to maintain the following records, including a complete comparative analysis of recorded values (against each other where possible) of the following records, if applicable:
 - Oil Record Book (Deck and Engine)
 - Engine Room Alarms
 - Tank Sounding Record Book
 - Personnel work records and lists
 - Maintenance records
 - Vendor service records
 - Bilge waste and sludge receipts
 - Deck Log
 - Garbage Record Book
 - Wastewater Discharge Log
 - Oil to Sea Equipment Interface records
 - Hazardous waste manifests
 - Solid waste discharge receipts
 - Oil Content Monitor (OCM) calibration records
 - Training records
 - Vetting documents
 - Inspection Documents
 - EMS or SQE Audit documents
- Assess the adequacy of the policy, procedures, and current practices used to store and dispose of the following, if applicable:
 - Solvents
 - Degreasers Cleaning wastes
 - Batteries
 - Paints
 - Oily rags
 - Fluorescent and incandescent bulbs
 - Expired boiler and engine chemicals
 - Used boiler and engine chemicals
 - Galley greases
 - Pyrotechnics
 - Medical supplies
 - Contaminated bunkers
 - Used Oils and greases
 - Incinerator ash

- Transformer oils
 - Contaminated refrigerants
 - Hazardous materials
- Assess and evaluate documentation that all vessel officers understand the requirements of the Court's order.
- Assess current practices and procedures associated with the Master and Chief Engineer's capability to communicate with each other and with shoreside personnel including the CCM and other appropriate managers as required under the IONIA Safety Management System.
- Assess the frequency and adequacy, through interviews of crewmembers, of shipboard pollution prevention and environmental protection meetings and training;
- Assess the current practices and procedures used on vessels and ashore to track crewmember environmental training, as well as the availability of and access to training resources;
- Assess the adequacy of existing reporting methods to report environmental concerns and evaluate the capability of a reporting individual to remain anonymous, and review processes for handling environmental concerns from crewmembers and shoreside personnel. Evaluate the adequacy of signage and instructional material relevant to use of the existing reporting methods;
- Assess the equipment procedures related to Oil Transfer Procedures, including slops, bilges and sludge discharges, conditions of hoses, connections and transfer equipment, including reviews of Declarations of Inspections, and methods in place to prevent illegal discharges via the shore connections;
- Assess the adequacy of all records related to any failure of existing safety or other management systems, including a review of nonconformities and respective corrective actions;
- Assess the availability and content of various manuals, schematics and documents required in the use of all pollution prevention equipment and activities.

At the discretion of the IEC, the IEC may:

- Assess the performance of the ODME in the presence of the Chief Mate. Ensure that members of the Deck department who operate the ODME are proficient in its operation and record keeping, including procedures for documenting ODME failures. The assessment should evaluate the correct running of pumps in the sample piping system; flow rates and pressure drops to ensure the system operates under correct flow conditions; correct functioning of the alarm system for no flow and other conditions; the triggering of alarms for manual signal inputs; recordings when manual overrides are activated and the proper operation of overboard interlocks. Related equipment to be tested will include permanent or portable tank gauging equipment used to determine oil

water interfaces. The assessment shall include an examination of personnel associated with such tasks the knowledge and understanding of the requirements and equipment operations.

- An assessment of related deck department, policy, procedures and equipment used in the discharge of dirty ballast or contaminated ballast tanks. The assessment shall include an examination of personnel associated with such tasks the knowledge and understanding of the requirements and equipment operations.
- An assessment of related deck department, policy, procedures and equipment associated with the use of slop tanks, including decanting, procedures associated with the draining of top lines, in addition tank cleaning procedures and the disposal of associated wastes into the slop tanks. The assessment shall include an examination of personnel associated with such tasks the knowledge and understanding of the requirements and equipment operations.
- The assessment of the ODME shall be recorded in the Deck Oil Record Book. In the event that the assessment determines that the ODME is not adequate then an immediate report shall be made to the Corporate Compliance Manager and the United States.

B. ONGOING AUDITS

Regular ongoing audits will consist of all the elements of the initial audit and any additional requirements approved by the Court during the term of probation. Where deficiencies are noted during audits, IONIA must manage an auditable feedback loop.

The ongoing audits shall occur at least once onboard each covered vessel during the period of 2nd and 3rd years of probation. (e.g. one ongoing audit for each vessel over the two year period).

Final Audit

The IEC shall perform a review and analysis of IONIA's implementation of best practices and the objectives of this order. The scope of the Final Audit shall consist of an onboard and underway review of all the ships subject to this order. The IEC must use the criteria set forth in above for the Initial Audit, and is also expected to update the audit requirements based upon any amendments to this order. The Final Audit may begin no earlier than 12 months prior to the end of the probationary period.

The Final Audit Report, along with any working papers and correspondence related to the audit, shall be submitted, in both electronic and hard copy form, at least three months before the end of the probationary period to the Special Master. The IEC is expected to evaluate whether or not IONIA is in full compliance with the requirements of this order, other terms of probation, and MARPOL.

In addition to the full compliance recommendation, the Final Audit Report shall contain Detailed Audit Findings, including the basis for each finding and identified areas of concern. Descriptive narratives pertaining to the different audit criteria are expected. When employees are evaluated for a particular topic their names must be provided. Audit documents or checklists that contain inclusive statements must include detail describing how the inclusive nature is determined. For example, a check list item that states “all crewmembers are aware of IONIA environmental policy” must state how that fact is determined. Any corrective measures taken at the time of discovery will be included in each report. Further, the report shall contain information related to the Audit’s Administration and identify the following.

- Audit scope, including the time period covered by the audit.
- The date(s) the on-site or ship portion of the audit was conducted.
- Identification of the audit team members and their total number of hours on site or ship.
- Identification of the company representatives and regulatory personnel observing the audit.
- The distribution list for the Final Audit Report.
- Summary of the audit process, including any obstacles encountered.

ATTACHMENT B

Minimum Engineering Risk Mitigation Measures

Environmental Tag System

IONIA shall implement an Environmental Tag System (ETS) that prevents unauthorized usage or connections within the engine room and machinery spaces and unauthorized opening of any through hull connection. IONIA shall install numbered seals to prevent the unauthorized connection to and discharge through piping systems that are or may be connected to the oily bilge system.

The ETS seals shall be non re-usable and uniquely numbered. An ETS log shall be maintained by the Master and Chief Engineer that records each time a seal is affixed or removed, including the date, time, seal number removed, seal number affixed, personnel involved, and reason for any seal removal/replacement.

The Master of the vessel shall retain the replacement environmental tags under his control in a secure location. The Corporate Compliance Manager will be responsible for ensuring fleet wide that no duplication of ETS seal numbers occur and will have a master tracking document indicating which series have been supplied to each vessel.

Bilge Main Cross - Connections

IONIA shall immediately notify all of its vessels regarding the prohibition against using cross connections from engine room bilge mains to the suction piping of larger pumps which may be referred to as the “fire and general service pump” or “fire, bilge and ballast” pump. Their message shall state that the usage of these crossovers is similar to bypassing the OWS equipment and is strictly prohibited. Cross connections to eductor systems capable of pumping out bilge wastes will also be referenced.

The deck plates above or near the locations of these cross connections and the valves bodies and associated hand wheels shall be painted international orange. A brightly colored sign with three inch letters shall be permanently fixed nearby - “Bilge System Piping Crossover - Emergency Use Only”

To prevent unauthorized usage, IONIA shall place ETS tags on these valves. The ETS log shall track anytime a crossover to the bilge main is opened. (If the valves are remotely operated from the engine control room the associated push button must be unable to be used without breaking an Environmental Tag and a suitable sign must be posted near the associated push buttons or switches providing similar restrictive language above as to its use.)

Emergency Bilge Suctions

All other bilge suction valves not connected to the bilge main, and independent emergency suctions to the vessel's engine room bilges like those which may be connected to sea water circulating pumps shall be painted brightly and labeled similarly "Emergency Bilge Suction - Emergency Use Only." Their valve wheels will also have a numbered and logged ETS tag capable of breakaway during emergency, testing, and maintenance. ETS tag numbers shall be kept in the Chief Engineer's official ETS log book and explanations given for breakage or replacement.

Blank Flanges

To prevent unauthorized connections within the engine room and machinery spaces of IONIA vessels, every blank or potentially removable flange associated with any piping leading overboard, on systems such as salt water service, main engine raw water cooling or other systems, shall be permanently secured, removed or fitted with numbered ETS tags through the flange bolts that will break when the bolt is removed to prevent unauthorized connections and discharges. The ETS tags used shall be numbered and records kept in the previously mentioned log.

The blank flange securing the bilge and sludge transfer system shore connection discharge valve at the discharge stations shall also require a numbered Environmental Tag, which will be maintained. ETS tag numbers shall be kept the Chief Engineer's official ETS logbook.

Bilge Sampling and OWS Performance Analysis

The IC auditor will take samples from the Engine Room Bilges, the OWS and the BHT. The purpose of this collection is to capture a sample that adequately represents the common fluids and contaminants that accumulate. No attempt should be made to collect a clean sample only.

The samples shall be forwarded to an appropriate lab selected by the CCM for a content analysis. The analysis of these representative samples shall then be provided to the manufacturer of the applicable oily water separator found onboard IONIA's vessels.

IONIA shall work cooperatively with the manufacturer to verify the equipment's capability to process fluids having this content. IONIA may choose to work with the manufacturer in this verification process and also to develop ways to improve the performance of existing equipment or may explore other separation technologies capable of handling the fluid.

Additional OWS / OCM Requirements

The sample line from the OWS discharge connection to the sample/flush line control valve will be painted a bright color to distinguish it from other tubing and piping in the area. The line must be routed so it is clearly visible to the extent possible for its entire length. No additional connections or tees of any kind may be added to the line.

The end connecting to the OWS discharge pipe may be fitted with a manual valve or petcock, or tamper proof automatic valve. The tube end fittings and the valve handle must be fitted with a numbered seal that will break if the valve is closed, removed, or if the tubing connection nut is loosened. The end nearest the sample/flush line control valve and any tubing in between the control valve and the OCM will be similarly protected to prevent any disassembly of the sensing system.

IONIA shall perform testing that ensures the OCM requires a sample flow for normal operation and control. Any OCM that allows the OWS to function normally without sample flow is prohibited unless all valves from the OWS discharge to the sample / flush line control valve are removed. IONIA shall ensure that every vessel's OWS is configured and capable of being fully operationally tested in port with the skin valve closed.

IONIA shall perform monthly operational tests of the OWS and OCM. The test shall be logged in the vessel's Engine Room Oil Record Book and a report sent to IONIA. A consolidated report will be sent to the President or Managing Director, and the CCM.

IONIA shall recalibrate the OCM at least annually. Certificate of calibrations must be retained onboard the vessel.

IONIA shall clean the OWS source tank and remove any accumulated oil at least every six months. These activities will be logged in the Oil Record Book.

Record Keeping

All Soundings and Logs required by this section shall be maintained onboard the vessel for a period of three years from the date of the final entry.

Oil Record Book Entries

Entries made into the Engine Room Oil Record Book shall be made by the Chief Engineer and each page shall be signed by the vessel's Chief Engineer and Master.

Tank Sounding Record Book

Vessel personnel shall be required to sound all waste, sludge and bilge tanks, associated with bilge water, and/or oil wastes at least daily. The Tank Sounding Record Book shall be initialed by the person who obtained the reading. The Tank Soundings Record Book shall be maintained in the engine control room and made available during all inspections and audits required by this ECP.

Fuel Oil/Lube Oil Purifier Settings and Line Breaks

IONIA shall have a standard system for monitoring fuel oil and lube oil management including the waste produced by the operation of the fuel oil and lube oil purifiers by way of the

SWOMS or similar system. Any incident involving ships receiving poor quality fuel shall be noted. References to appropriate receipts shall be made.

Any extraordinary operations such as the need for frequent draining of fuel oil service and settling tanks, and engine lube oil sump tanks of excessive water, or other problems such as waxing, compatibility, stratification or contamination shall be noted, including shoot settings, and explanations provided for the handling of unburned sludges, oils, oily wastes, and used filters.

Any line or component on a fuel, lube, or waste oil system fails, including high pressure lines on diesel engines, or due to an operational error, a record shall be made and a notation given as to the quantity released. In addition, an explanation shall be provided as to how the unintended released fluid was handled. Any unintended releases of quantities of water, salt, fresh, condensate, or cooling shall also be recorded. The most senior engineer involved in any of the circumstances previously described will make the entry and provide his or her signature.

Oil-to-Sea Interfaces

IONIA shall have a standard system for monitoring equipment having oil-to-sea interfaces. Such interfaces may include oil lubricated stern tubes, bow or stern thrusters, stabilizers, hydraulically operated controllable pitch propellers, and similar equipment whereby the leakage of a sealing component may cause a loss of operating medium into the surrounding waters of the vessel. Any replenishment of oil into the head tanks, operating systems reservoirs or other receivers associated with this equipment shall be logged regardless of quantity. Ingress of water or drainage of water into or from these systems must also be logged.

When known, an explanation of the loss shall be provided, along with dates and time and signature. Routine stern tube lube oil loss must be logged and reported immediately on each occasion. If any Chief Engineer fails to promptly and accurately report these conditions, IONIA will investigate and take appropriate action, which may include termination of employment.

Fleet Engineering Survey

IONIA shall survey its shipboard engineers on its vessels at all levels for information on how to make the OWS, OCM, associated systems and waste management processes tamper proof and for methods on reducing or handling waste accumulations within engine rooms, machinery spaces or pump rooms within three months of the implementation of this plan. An assessment requesting the frank opinions of the vessel's engineers into their ability to adequately maintain the vessel systems, equipment and components will be included. The survey will emphasize non-retaliation for open and honest opinions and reports of current non-compliant circumstances.

The CCM and his staff shall evaluate the responses and establish a plan to evaluate, test and implement viable tamper-proofing solutions, methods to reduce and handle waste accumulations, cargo slops and address the maintenance concerns suggested by the vessel

engineers. A summary of the reported information and corrective actions will be provided to the points of contact noted above.

IONIA may, as a further preventative measure, install tamper proof connections and fittings, and use numbered seals or Environmental Tags on supply lines leading the discharge sample to the monitoring cell of the Oil Discharge and Monitoring Equipment. Such tamper proof connections may be similar to those used on solenoid controlled three-way valves that control fluid flow to Oil Content Monitors on IONIA's Oily Water Separators. Seals or Environmental Tags may be provided on strainer covers and additional arrangements may be made to prevent any connection to clean water sources or other methods to trick the monitoring equipment. The ODME should be recalibrated at least annually.